Appl. No.: 10/629,444

Reply to Office Action of: July 20, 2006

Amendments to the Specification:

Please replace the paragraph [0039] with the following amended paragraph:

[0039] According to the present invention, a colorant incorporated into the composition of the porous inorganic component or coating layer on a porous substrate can reduce the relative level of reflectance and auto-fluorescence. In certain embodiments, cobalt oxide or nickel (II) oxide components, which are used in Black Light Blue glass for conventional lighting applications, were incorporated into a glass composition to achieve a tint. The dark glass frit appears as a grayish layer after its it is applied and fired to bond to the underlying non-porous backing or support. Although not intending to be bound by theory, it is believed that enhanced sensitivity in porous inorganic substrates is based upon light scattering. Uncontrolled light scattering, however, is believed to be a concern. For substrates that have yet to be prepped with the biological molecules or probes, the colorant tint according to the invention consistently reduces background issues due to uncontrolled light scattering in a coated or bare porous glass layer.

Please replace the paragraph [0045] with the following amended paragraph:

[0045] Crushed borosilicate glass particles are sieved and wet-milled to a reduced particle size (average size in the range of about 0.07-3.5 μ m). The particles were ball-milled for 24-72 hours using a one gallon bottle (Nalgene) charged with the crushed borosilicate glass, ZrO₂ milling cylinders and filled with isopropanol to about 85 percent full. After milling, the slurry was stirred and then allowed to stand without disturbance for the particles to settle. Settling can further control the size distribution of the glass particles before a binder is added. The liquid slurry was poured from the Nalgene bottle and the isopropanol was evaporated on a hot plate to recover the glass powder. Care was taken no not to disturb the sediment at the bottom of the bottle. The average particle size of the borosilicate powder obtained after settling was in the range of about 0.05-1.5 μ m. The borosilicate powder was used in preparation of slip for tape casting.